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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,884	09/12/2003	Robert K. Rowe	020204-001410US	6953

20350 7590 11/28/2005

TOWNSEND AND TOWNSEND AND CREW, LLP
TWO EMBARCADERO CENTER
EIGHTH FLOOR
SAN FRANCISCO, CA 94111-3834

EXAMINER

LAVIN, CHRISTOPHER L

ART UNIT PAPER NUMBER

2621

DATE MAILED: 11/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/660,884	ROWE ET AL.	
	Examiner	Art Unit	
	Christopher L. Lavin	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24-29, 32-38 and 41 is/are rejected.
- 7) ☒ Claim(s) 30, 31, 39 and 40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/21/04; 10/04/04; 11/06/03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

1. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

2. Claims 29 and 38 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 1 of prior U.S. Patent No. 6,628,809. This is a double patenting rejection. The claims differ only in that application claim 29 recites applying "an incident optical spectral distribution", while patent claim 1 recites applying "a plurality of optical wavelengths". A "optical spectral distribution" and a "plurality of optical wavelengths" are coextensive in scope, especially in light of the common application and patent disclosures that do not indicate otherwise.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 24 – 28 and 33 – 37 are rejected under 35 U.S.C. 102(e) as being anticipated by Wunderman (6,122,042).

In regards to claim 32, A system for identifying an individual, the system comprising: an optical source adapted to apply an incident optical spectral distribution to tissue of the individual (col. 38, lines 15 – 31); a spectrometer adapted to measure a response optical spectral distribution emanating from the tissue (col. 38, lines 15 – 31; col. 42, lines 57 – 61); a computational device in communication with the spectrometer and having a program with computer-readable instructions for (col. 39, lines 10 – 37: The computations described would require a computational device.): deriving a difference optical spectral distribution by performing a mathematical operation on the response optical spectral distribution and a reference optical spectral distribution (col. 39, lines 10 – 37); determining whether characteristics of the difference optical spectral distribution are consistent with the individual being a person associated with the reference optical spectral distribution (col. 39, lines 10 – 37).

In regards to claim 34, The system recited in claim 33 wherein the instructions for deriving and determining are executed for a plurality of reference optical spectral distributions, each which is associated with a different person, whereby a determination is made whether the individual is one of a set of persons (col. 39, lines 10 – 37).

In regards to claim 35, The system recited in claim 33 wherein the instructions for deriving and determining are executed for a single reference optical spectral distribution associated with a purported identity of the individual, whereby a determination is made whether the individual has the purported identity (col. 39, lines 10 – 37).

In regards to claim 36, The system recited in claim 33 wherein the mathematical operation comprises calculation of a difference between the response optical spectral distribution and the reference optical spectral distribution (col. 39, lines 10 – 37).

In regards to claim 37, The system recited in claim 33 wherein the mathematical operation comprises calculation of a ratio between the response optical spectral distribution and the reference optical spectral distribution (col. 39, lines 10 – 37: Merriam-Websters defines a ratio as a “relationship in quantity between two things”. Wunderman is finding a relationship between two optical spectral distributions.).

In regards to claims 24 – 28, claims 24 - 28 are rejected for the same reasons as claims 33 – 37. The argument analogous to that presented above for claims 33 – 37 is applicable to claims 24 – 28.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2621

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 32 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wunderman.

In regards to claim 41, Wunderman discloses (col. 39, lines 10 – 37) that a least mean square difference is taken in order to determine if there is a match. However earlier in the reference Wunderman teaches (col. 17, lines 20 – 44) that discriminant analysis may be used in place of least mean square difference.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to replace the least mean square operation in the system disclosed by Wunderman with a discriminant analysis operation. As Wunderman teaches both of these operations can be used to give accurate results it would have been obvious to try replacing the least square operation with the other operations Wunderman discloses to attempt to find a more accurate result for the specialized goal of identifying an individual. A discriminant analysis may lead to a better match criterion, requiring fewer users to enter PINs.

Allowable Subject Matter

9. Claims 30, 31, 39, and 40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The art of record does not teach nor does it suggest the specific features called for in the claims, particularly using a database of difference values to identify an individual. Wunderman teaches that a database is used to identify individuals; however, the database used by Wunderman holds initial readings (potentially averaged together) for an individual and not difference values.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. US Patent 6,631,199 discloses a similar system and method as claimed by the applicant. However it does not use a difference database to identify individuals.

12. US Patent 6,928,181 discloses a similar system and method as claimed by the applicant. However it does not use a difference database to identify individuals.

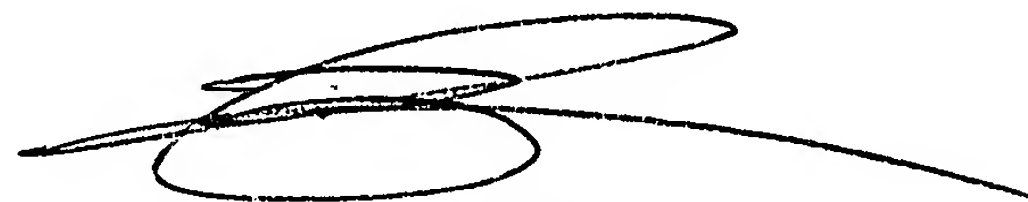
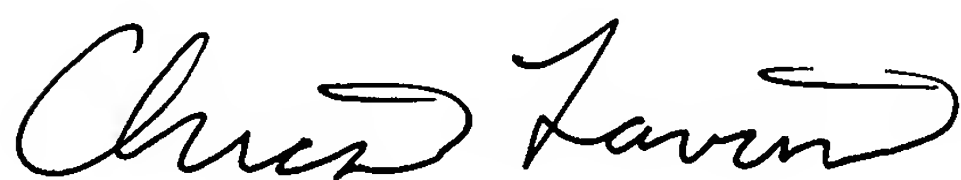
13.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher L. Lavin whose telephone number is 571-272-7392. The examiner can normally be reached on M - F (8:30 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mancuso Joseph can be reached on (571) 272-7695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Lavin



**BRIAN WERNER
PRIMARY EXAMINER**